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(FILE 'HOME' ENTERED AT 16:41:08 ON 04 FEB 2004)

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,  
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,  
CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPUS, DISSABS, DGENE,  
DRUGB, DRUGMONOG2, IMSDRUGNEWS, DRUGU, IMSRESEARCH, ...' ENTERED AT  
16:41:24 ON 04 FEB 2004

L1 339435 S OLIGOSACCHARIDE OR GLYCOLIPID

L2 33845 S L1 (L) (MICROORGANISM OR PLANT)

L3 1091 S L2 (L) GLYCOSYLTRANSFERASE

L4 395 S L3 (L) ACCEPTOR

L5 365 S L4 (L) (PREP? OR MAKE OR SYNTH? OR FERMENT? OR PRODU?)

L6 340 DUP REM L5 (25 DUPLICATES REMOVED)

L7 35 S L6 AND PY<1998

=> d'ibib ab 1-35

L7 ANSWER 1 OF 35 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
ACCESSION NUMBER: 1995-12749 BIOTECHDS  
TITLE: Application of sucrose-synthase from rice grains for the synthesis of carbohydrates;  
e.g. stereospecific oligosaccharide e.g.  
20-deoxy-alpha-L-sorbofuranosyl glucose, dTDP-glucose and UDP-glucose production (conference paper)  
AUTHOR: Elling L; Grothus M; Zervosen A; Kula M R  
CORPORATE SOURCE: Univ.Dusseldorf-Heinrich-Heine; Res.Cent.Juelich-Inst. Enzyme-Technol.  
LOCATION: Institute for Enzyme Technology of the Heinrich-Heine-University Duesseldorf Research Center Juelich, P.O. Box 2050, 52404 Juelich, Germany.  
SOURCE: Ann.N.Y.Acad.Sci.; (1995) 750, 329-31  
CODEN: ANYAA9  
ISSN: 0077-8923  
12th International Enzyme Engineering Conference, Deauville, France, 19-24 September, 1993.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Enzyme-catalyzed oligosaccharide production offers an efficient way to obtain stereospecific molecules. Enzymatic production of sugars and activated sugars by plant glycosyltransferase sucrose-synthase (EC-2.4.1.13) is described. The plant enzyme catalyzed in vitro synthesis and cleavage of sucrose. The plant sucrose-synthase used nucleoside diphosphates instead of nucleoside triphosphates (used by pyrophosphorylases) to form activated sugars. At pH 7.0, space time yields of 58.8 g/l.day and 98 g/l.day were achieved for batch and continuous production, respectively, of dTDP-glucose in an enzyme membrane reactor. In the used 10 ml reactor, 980 mg of dTDP-glucose was formed with 1 U enzyme in 24 hr. Sucrose-synthase could be used for cyclic regeneration of UDP-glucose in the synthesis of N-acetyllactosamine using UDP-galactose-epimerase (EC-5.1.3.2) and beta-1,4-galactosyltransferase (EC-2.4.1.22). The synthesis reaction was used to prepare 20-deoxy-alpha-L-sorbofuranosyl-(D)-glucose in 17% yield. A variety of aldoses, ketoses and di- and trisaccharides were used as acceptor substrates with UDP-glucose as donor substrate. (9 ref)

L7 ANSWER 2 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2003:309002 USPATFULL  
TITLE: Method of producing derivatives of lactosamine  
INVENTOR(S): Nilsson, Kurt, Lund, SWEDEN  
PATENT ASSIGNEE(S): Procur AB, Lund, SWEDEN (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6653109	B1	20031125	
	WO 9518864		19950713	<--
APPLICATION INFO.:	US 1996-666542		19960628 (8)	
	WO 1995-SE10		19950109	

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1994-34	19940106
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Zeman, Mary K.	
LEGAL REPRESENTATIVE:	Smith, Gambrell & Russell, LLP	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	997	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of producing a compound with .beta.1-4 linkage which contains the lactosamine structure involving reacting at least one

donor substance Gal. $\beta$ .OR where R is an organic group, and at least one acceptor substance which is a glucopyranosamino derivative having the formula GlcNR"--R'', wherein NR'' is an azido, 2-N-acetyl-, 2-N-phtalimido, or an organic group bound to the 2-N-group of glucosamine, wherein R'' is a glycosidically bound fluoro or is an O-, C-, N- or S-glycosidically bound aliphatic or aromatic compound, with the proviso that if NR'' is NHAc then R'' is not OH and if NR'' is not NHAc then R'' may be OH, in the presence of Bullera singularis or an E.C. group 3.2 glycosidase of essentially the same structure as an E.C. Group 3.2 glycosidase obtained from Bullera singularis to form the lactosamine derivative; and optionally isolating the compound with . $\beta$ .1-4 linkage which contains the lactosamine structure.

L7 ANSWER 3 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2002:224600 USPATFULL  
 TITLE: Galactopyranosides and their use  
 INVENTOR(S): Nilsson, Kurt, Lund, SWEDEN  
 PATENT ASSIGNEE(S): Procur AB, Lund, SWEDEN (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6444655	B1	20020903	
	WO 9723637		19970703	<--
APPLICATION INFO.:	US 1998-91486		19980619	(9)
	WO 1996-SE1756		19961223	
			19980619	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1995-4616	19951221
	SE 1996-58	19960104
	SE 1996-290	19960124
	SE 1996-994	19960313
	SE 1996-1309	19960402
	SE 1996-1849	19960511
	SE 1996-1891	19960515
	SE 1996-1916	19960519
	SE 1996-2844	19960718
	SE 1996-3043	19960820
	SE 1996-3434	19960918

DOCUMENT TYPE: Utility  
 FILE SEGMENT: GRANTED  
 PRIMARY EXAMINER: Prats, Francisco  
 LEGAL REPRESENTATIVE: Smith, Gambrell & Russell  
 NUMBER OF CLAIMS: 8  
 EXEMPLARY CLAIM: 1  
 NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)  
 LINE COUNT: 1956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to simplified synthesis, new carbohydrate-based products and practical use of different carbohydrate-based products. Examples of these are (Gal. $\alpha$ .1-3Gal), GlcNAc. $\beta$ .1-3Gal, . $\alpha$ .- or . $\beta$ .-glycosides thereof, Gal. $\alpha$ .1-3Gal- containing tri-, or higher oligosaccharides, . $\alpha$ .- or . $\beta$ .-glycosides thereof, GlcNAc. $\beta$ .1-3Gal containing tri-, tetra-, or higher oligosaccharides, and derivatives and/or . $\alpha$ .- or . $\beta$ .-glycosides thereof, Gal. $\alpha$ .1-3GalGlcNAc. $\beta$ .1-3Gal, . $\alpha$ .- or . $\beta$ .-glycosides thereof, Gal. $\alpha$ .1-3Gal. $\beta$ .1-4GlcNAc. $\beta$ .1-3Gal. $\beta$ .1-4Glc, or other higher oligosaccharides containing the Gal. $\alpha$ .1-3Gal-structure, . $\alpha$ .- or . $\beta$ .-glycosides thereof, modified carbohydrates, di-, tri-, oligo-, or polyfunctional products containing carbohydrate structures, and the use of the products for synthesis, affinity purification, diagnostic applications and therapy.

L7 ANSWER 4 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2001:82908 USPATFULL  
 TITLE: Carbohydrate derivatives and their solid-phase synthesis  
 INVENTOR(S): Schmidt, Richard R., Constance, Germany, Federal

PATENT ASSIGNEE(S):  
Republic of  
Rademann, Jorg, Kreuzlingen, Switzerland  
BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal  
Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6242583	B1	20010605	
	WO 9745436		19971204	<--
APPLICATION INFO.:	US 1998-171566		19981021	(9)
	WO 1997-EP2393		19970509	
			19981021	PCT 371 date
			19981021	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1996-19621177	19960524

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Celsa, Bennett  
LEGAL REPRESENTATIVE: Keil & Weinkauf  
NUMBER OF CLAIMS: 4  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1192

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to carbohydrate derivatives, to a process for their preparation and to their use.

L7 ANSWER 5 OF 35 USPATFULL on STN

ACCESSION NUMBER: 2000:77211 USPATFULL  
TITLE: Method of producing derivatives of Glc-.beta.  
1-4Glc-N-acetyl  
INVENTOR(S): Nilsson, Kurt G. I., Lund, Sweden  
PATENT ASSIGNEE(S): Bioflexin AB, Lund, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6077695		20000620	
	WO 9703206		19970130	<--
APPLICATION INFO.:	US 1998-981715		19980616	(8)
	WO 1995-IB561		19950713	
			19980616	PCT 371 date
			19980616	PCT 102(e) date

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Prouty, Rebecca E.  
LEGAL REPRESENTATIVE: Smith Gambrell & Russell, LLP.  
NUMBER OF CLAIMS: 24  
EXEMPLARY CLAIM: 1  
LINE COUNT: 751

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of producing a compound which contains the Glc.beta.1-4GlcN structure involving reacting at least one donor substance Glc.beta.OR where R is an organic group, and at least one acceptor substance which is a glucopyranosamino derivative having the formula GlcNR"-R'", wherein NR" is an azido, 2-N-acetyl-, 2-N-phtalimido, or an organic group bound to the 2-N-group of glucosamine, wherein R''' is a glycosidically bound fluoro or is an O-, C-, N- or S-glycosidically bound aliphatic or aromatic compound, with the optional proviso that if NR" is NHAc then R''' is not OH and if NR" is not NHAc then R''' may be OH, in the presence of Bullera singularis or an E.C. group 3.2 glucosidase of essentially the same structure as an E.C. group 3.2 glucosidase obtained from Bullera singularis to form the Glc.beta.1-4GlcN derivative; and optionally isolating the compound which contains the Glc.beta.1-4GlcN structure.

L7 ANSWER 6 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:40198 USPATFULL  
TITLE: Process for the complete removal of protective groups

on nucleoside diphosphate and triphosphate sugars with acetylesterase

INVENTOR(S) : Oehrlein, Reinhold, Rheinfelden, Germany, Federal Republic of

PATENT ASSIGNEE(S) : Baisch, Gabriele, Binzen, Germany, Federal Republic of Novartis AG, Basel, Switzerland (non-U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5888777 19990330

APPLICATION INFO.: WO 9624683 19960815 <--

US 1997-875882 19970806 (8)

WO 1996-EP422 19960201

19970806 PCT 371 date

19970806 PCT 102(e) date

NUMBER	DATE
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PRIORITY INFORMATION: CH 1995-363 19950207

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Weber, Jon P.

LEGAL REPRESENTATIVE: Ferraro, Gregory D.

NUMBER OF CLAIMS: 25

EXEMPLARY CLAIM: 1

LINE COUNT: 939

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the preparation of nucleoside diphosphate and triphosphate sugars wherein hydroxyl protective groups are removed enzymatically, with acetylesterase and a process for the preparation of these sugars, which comprises coupling a nucleotide with a sugar-1-phosphate activated with a carbonyl bisazole and then removing the hydroxyl protective groups enzymatically with acetylesterase.

L7 ANSWER 7 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:4983 USPATFULL

TITLE: Plants and processes for obtaining them

INVENTOR(S) : Keeling, Peter Lewis, Ames, IA, United States

Lomako, Joseph, Miami, FL, United States

Gieowar-Singh, Dave, Miami, FL, United States

Singletary, George William, Ankeny, IA, United States

Whelan, William Joseph, Miami, FL, United States(4)

Zeneca Limited, London, United Kingdom (non-U.S. corporation)

The University of Miami, Miami, FL, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5859333 19990112

APPLICATION INFO.: WO 9404693 19940303 <--

US 1995-392816 19951218 (8)

WO 1993-GB1821 19930826

19951218 PCT 371 date

19951218 PCT 102(e) date

NUMBER	DATE
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PRIORITY INFORMATION: GB 1992-18185 19920826

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Fox, David T.

LEGAL REPRESENTATIVE: Cushman Darby & Cushman IP Group of Pillsbury Madison & Sutro

NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM: 1,8

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT: 2043

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Plants with an altered starch synthesizing ability are produced by incorporating into the genome of the plant at least one donor gene encoding a starch primer. The starch primer is an enzyme capable of initiating starch synthesis, such as an amylogenin and/or glycogenin. DNA constructs encoding a starch primer are provided, particularly constructs encoding amylogenin from maize.

L7 ANSWER 8 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:4412 USPATFULL  
TITLE: Compositions and methods for producing sialyltransferases  
INVENTOR(S): Paulson, James C., Del Mar, CA, United States  
Wen, Xiaohong, San Diego, CA, United States  
Livingston, Brian, San Diego, CA, United States  
Burlingame, Alma L., Sausalito, CA, United States  
Medzihradszky, Katalin, San Francisco, CA, United States  
Kelm, Sorge, Uiel, Germany, Federal Republic of  
Gillespie, William, Santa Monica, CA, United States  
PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858751		19990112
	WO 9504816		19950216 <--
APPLICATION INFO.:	US 1995-446875		19950712 (8)
	WO 1994-US8516		19940727
			19950712 PCT 371 date
			19950712 PCT 102(e) date
RELATED APPLN. INFO.:			Continuation-in-part of Ser. No. US 1993-102385, filed on 4 Aug 1993 which is a continuation-in-part of Ser. No. US 1992-925369, filed on 4 Aug 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-850357, filed on 9 Mar 1992, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Wax, Robert A.  
ASSISTANT EXAMINER: Saidha, Tekchand  
LEGAL REPRESENTATIVE: Oppenheimer Wolff & Donnelly LLP  
NUMBER OF CLAIMS: 8  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 23 Drawing Figure(s); 19 Drawing Page(s)  
LINE COUNT: 3178  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB DNA isolates coding for sialyltransferase which contain a conserved region of homology and methods of obtaining such DNA are provided, together with expression systems for recombinant production of the various sialyltransferases.

L7 ANSWER 9 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1999:1634 USPATFULL  
TITLE: Compositions comprising complement related proteins and carbohydrates, and methods for producing and using said compositions  
INVENTOR(S): Rittershaus, Charles W., Malden, MA, United States  
Toth, Carol A., Sharon, MA, United States  
PATENT ASSIGNEE(S): T Cell Sciences, Inc., Needham, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5856300		19990105
	WO 9426786		19941124 <--
APPLICATION INFO.:	US 1995-553339		19951113 (8)
	WO 1994-US5285		19940512
			19951111 PCT 371 date
			19951111 PCT 102(e) date
DOCUMENT TYPE:	Utility		

FILE SEGMENT: Granted  
PRIMARY EXAMINER: Achutamurthy, Ponnathapura  
LEGAL REPRESENTATIVE: Yankwich, Leon R., Kubinec, Jeffrey S.  
NUMBER OF CLAIMS: 37  
EXEMPLARY CLAIM: 1,28  
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)  
LINE COUNT: 3557  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides compositions comprising at least one complement moiety and at least one carbohydrate moiety, and methods of producing such compositions. In particular, the compositions of the invention comprise complement proteins related to the complement receptor type I, and further comprise ligands for intracellular molecules, such as selectins. In a preferred embodiment, the compositions comprise a complement-related protein in combination with the Louis X antigen or the sialyl Lewis X antigen. The compositions of the invention have use in the diagnosis or therapy of disorders involving complement activity and inflammation. Pharmaceutical compositions are also provided for treating or reducing inflammation mediated by inappropriate complement activity and intercellular adhesion.

L7 ANSWER 10 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1998:162313 USPATFULL  
TITLE: Sugar-chain synthetase and process for producing the same  
INVENTOR(S): Tsuji, Shuichi, Saitama, Japan  
Kurosawa, Nobuyuki, Saitama, Japan  
Hamamoto, Toshiro, Saitama, Japan  
Lee, Young-Choon, Saitama, Japan  
Nakaoka, Takashi, Saitama, Japan  
Kojima, Naoya, Saitama, Japan  
PATENT ASSIGNEE(S): The Institute of Physical and Chemical Research, Saitama, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5854042		19981229
	WO 9518217		19950706
APPLICATION INFO.:	US 1996-666367		19960819 (8)
	WO 1994-JP2182		19941222
			19960819 PCT 371 date
			19960819 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1993-348260	19931224
	JP 1994-57369	19940328
	JP 1994-91507	19940428
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Patterson, Jr., Charles L.	
LEGAL REPRESENTATIVE:	Wenderoth, Lind & Ponack, LLP	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)	
LINE COUNT:	2054	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel GalNAc .alpha. 2,6-sialyltransferases P-B1 and P-B3; GalNAc .alpha. 2,6-sialyltransferase genes encoding the above GalNAc .alpha. 2,6-sialyltransferases P-B1 and P-B3; and an extracellularly releasable protein catalyzing GalNAc .alpha. 2,6-sialic acid transfer which comprises a polypeptide portion as being an active domain of the GalNAc .alpha. 2,6-sialyltransferase P-B1 or P-B3 together with a signal peptide are provided. Also provided is a process for preparing a sialyltransferases which enables efficient recovery of a sialyltransferase expressed in a large quantity in microorganisms.

L7 ANSWER 11 OF 35 USPATFULL on STN

ACCESSION NUMBER: 1998:51472 USPATFULL  
 TITLE: Purified saccharose-synthase, process for its production and its use  
 INVENTOR(S): Elling, Lothar, Aachen, Germany, Federal Republic of  
 Kula, Maria-Regina, Niederzier, Germany, Federal Republic of  
 PATENT ASSIGNEE(S): Forschungszentrum Julich GmbH, Julich, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5750389		19980512
	WO 9401540		19940120
APPLICATION INFO.:	US 1995-367178		19950106 (8)
	WO 1993-DE562		19930626
			19950106 PCT 371 date
			19950106 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1992-4221595	19920701
	DE 1993-4304558	19930216
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Lankford, Jr., Leon B.	
LEGAL REPRESENTATIVE:	Dubno, Herbert, Myers, Jonathan	
NUMBER OF CLAIMS:	7	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	15 Drawing Figure(s); 11 Drawing Page(s)	
LINE COUNT:	714	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Nucleotide sugars, especially UDP, ADP, CDP or TDP saccharoses can be enzymatically obtained by the reaction of nucleoside diphosphates with di or trisaccharides with a saccharose synthase in which the virtual absence of nucleoside phosphatases (0.1% or less) can be ensured by special purification methods and sensitive detection. The purification of the raw extract, obtained preferably from rice grains, comprises especially the application of the ultra-filtered extract containing 50 mM KCl with a pH 8 on a sepharose Q column and a gradient elution out of the column at a pH 8 with 50 to 500 mM KCl.

L7 ANSWER 12 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:120488 USPATFULL  
 TITLE: Methods of making transgenic animals producing oligosaccharides and glycoproteins  
 INVENTOR(S): Prieto, Pedro Antonio, Columbus, OH, United States  
 Smith, David Fletcher, Athens, GA, United States  
 Cummings, Richard Dale, Edmond, OK, United States  
 Kopchick, John Joseph, Athens, OH, United States  
 Mukerji, Pradip, Gahanna, OH, United States  
 Moremen, Kelley Wilson, Athens, GA, United States  
 Pierce, James Michael, Athens, GA, United States  
 PATENT ASSIGNEE(S): Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5700671		19971223
APPLICATION INFO.:	US 1995-434151		19950502 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-209132, filed on 9 Mar 1994		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Chambers, Jasemine C.		
ASSISTANT EXAMINER:	Crouch, Deborah		
LEGAL REPRESENTATIVE:	Becker, Cheryl L.		
NUMBER OF CLAIMS:	8		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	19 Drawing Figure(s); 15 Drawing Page(s)		

LINE COUNT: 1805

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to transgenic non-human mammals characterized in that the genome of said mammals contain at least one heterologous gene encoding for the production of heterologous catalytic entity selected from the group consisting of enzymes and antibodies, and wherein said catalytic entity produces a second heterologous product in the milk of said mammal. Especially useful in the practice of the invention are human glycosyltransferases and transgenic sheep, goats and cows. The heterologous product includes oligosaccharides and glycoconjugates.

L7 ANSWER 13 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:109744 USPATFULL

TITLE: DNA sequence encoding N-acetyl-galactosamine-transferase

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

Smith, Peter L., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

NUMBER	KIND	DATE
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US 5691180	19971125	<--
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US 1994-255670	19940609	(8)
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DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Elliott, George C.

ASSISTANT EXAMINER: Riley, Jezia

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 11 Drawing Page(s)

LINE COUNT: 1923

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB .beta.1,4-N-acetyl-galactosamine-transferase catalyzes the addition of N-acetyl-galactosamine in .beta.1,4-linkage to subterminal galactose substituted with an .alpha.2,3-linked N-acetyl-neuraminic acid residue.

L7 ANSWER 14 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:91344 USPATFULL

TITLE: Methods to identify hemochromatosis

INVENTOR(S): Rothenberg, Barry E., P.O. Box 997, Del Mar, CA, United States 92014

NUMBER	KIND	DATE
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US 5674681	19971007	<--
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US 1994-349883	19941206	(8)
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DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Horlick, Kenneth R.

LEGAL REPRESENTATIVE: Fish & Richardson P.C.

NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 2

LINE COUNT: 1877

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods to identify hemochromatosis in an individual. For example, the invention provides a method of detecting reduced association of .beta..sub.2 -microglobulin with a nonclassical MHC class I heavy chain molecule or a mutation in nonclassical MHC class I heavy chain-encoding DNA which results in a reduction of .beta..sub.2 -microglobulin-heavy chain association indicating that the individual tested has or is at risk of having hemochromatosis.

L7 ANSWER 15 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:51981 USPATFULL

TITLE: Disaccharide inflammation inhibitors and uses thereof

INVENTOR(S): Esko, Jeffrey D., 1220 30th St. South, Birmingham, AL, United States 35205

Sarkar, Arun K., 4114 Elder Oaks Ways, Apt. D,  
Birmingham, AL, United States 35209

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5639734		19970617	<--
APPLICATION INFO.:	US 1994-359582		19941220	(8)
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Kight, John			
ASSISTANT EXAMINER:	Fonda, Kathleen Kahler			
LEGAL REPRESENTATIVE:	Adler, Benjamin Aaron			
NUMBER OF CLAIMS:	18			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 6 Drawing Page(s)			
LINE COUNT:	1120			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a composition of matter comprising a biosynthetic anti-inflammatory oligosaccharide, comprising the structure of: sugar - sugar - X - R; wherein said sugar is selected from the group consisting of N-acetylneuraminic acid, galactose, N-acetylgucosamine, N-acetylgalactosamine, fucose and mannose; wherein X is a bridging atom selected from the group consisting of oxygen, sulfur, nitrogen and carbon; and wherein R is an aglycone selected from the group consisting of naphthol, naphthalenemethane, indenol, a heterocyclic derivative of indenol, a heterocyclic derivative of naphthol and a heterocyclic derivative of naphthalenemethanol. Also provided is a method of treating an inflammatory disease in an individual comprising the step of administering to said individual a therapeutically effective dose of the novel composition of the present invention.

L7 ANSWER 16 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:5881 USPATFULL

TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5595900		19970121	<--
APPLICATION INFO.:	US 1995-393246		19950223	(8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, now abandoned which is a division of Ser. No. US 1992-914281, filed on 20 Jul 1992, now patented, Pat. No. US 5324663 which is a continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned			

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.

ASSISTANT EXAMINER: Prouty, Rebecca

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 2

EXEMPLARY CLAIM: 2

NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 5781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a

membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

L7 ANSWER 17 OF 35 USPATFULL on STN

ACCESSION NUMBER: 97:3736 USPATFULL

TITLE: Oligosaccharide enzyme substrates and inhibitors:  
methods and compositions

INVENTOR(S): Wong, Chi-Huey, San Diego, CA, United States  
Ichikawa, Yoshitaka, San Diego, CA, United States

PATENT ASSIGNEE(S): Shen, Gwo-Jenn, Carlsbad, CA, United States  
The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5593887 19970114 <--

APPLICATION INFO.: US 1995-476685 19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-219242, filed on 29 Mar 1994, now patented, Pat. No. US 5461143 which is a continuation-in-part of Ser. No. US 1992-852409, filed on 16 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-738211, filed on 30 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-670701, filed on 18 Mar 1991, now patented, Pat. No. US 5278299 And Ser. No. US 1991-707600, filed on 30 May 1991, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Fleisher, Mindy

ASSISTANT EXAMINER: Weiss, Bonnie D.

LEGAL REPRESENTATIVE: Welsh & Katz, Ltd.

NUMBER OF CLAIMS: 4

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 3572

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oligosaccharide compounds that are substrates and inhibitors of glycosyltransferase and glycosidase enzymes and compositions containing such compounds are disclosed. A method of glycosylation is also disclosed. An E. coli transformed with phagemid CMPSIL-1, which phagemid comprises a gene for a modified CMP-sialic acid synthetase enzyme, which transformed E. coli has the ATCC accession No. 68531 is also provided.

L7 ANSWER 18 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:113838 USPATFULL

TITLE: Apparatus for the synthesis of saccharide compositions

INVENTOR(S): Roth, Stephen, Gladwyne, PA, United States

PATENT ASSIGNEE(S): NEOSE Pharmaceuticals, Inc., Horsham, PA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5583042 19961210 <--

APPLICATION INFO.: US 1994-215727 19940322 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-163534, filed

on 9 Dec 1993, now abandoned which is a continuation of Ser. No. US 1992-955687, filed on 2 Oct 1992, now patented, Pat. No. US 5288637 which is a continuation of Ser. No. US 1991-683810, filed on 11 Apr 1991, now patented, Pat. No. US 5180674 which is a continuation-in-part of Ser. No. US 1990-509560, filed on 16 Apr 1990, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Rollins, John W.  
ASSISTANT EXAMINER: Prats, Francisco C.  
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.  
NUMBER OF CLAIMS: 25  
EXEMPLARY CLAIM: 1  
LINE COUNT: 978

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to an apparatus containing specific binary combinations of glycosyltransferases, for the synthesis of specific saccharide compositions such as, for example, oligosaccharides, polysaccharides, glycolipids, and glycopeptides.

L7 ANSWER 19 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:77808 USPATFULL  
TITLE: Methods for the synthesis of monofucosylated oligosaccharides terminating in di-N-acetyllactosaminyl structures  
INVENTOR(S): Kashem, Mohammed A., Edmonton, Canada  
Venot, Andre P., Edmonton, Canada  
Smith, Richard, Edmonton, Canada  
PATENT ASSIGNEE(S): Alberta Research Council, Alberta, Canada (non-U.S. corporation)

NUMBER	KIND	DATE	
US 5550155		19960827	<--
US 1994-323100		19941014 (8)	
Continuation of Ser. No. US 1992-914172, filed on 14 Jul 1992, now patented, Pat. No. US 5374655 which is a continuation-in-part of Ser. No. US 1992-889017, filed on 26 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-771259, filed on 2 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-714161, filed on 10 Jun 1991			

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Kight, III, John  
ASSISTANT EXAMINER: Leary, Louise N.  
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis  
NUMBER OF CLAIMS: 7  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)  
LINE COUNT: 1837

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Monofucosylated and monosialylated derivatives of the compound .beta.Gal(1-4).beta.GlcNAc(1-3).beta.Gal(1-4).beta.GlcNAc-OR, where R is hydrogen, a saccharide, an oligosaccharide or an aglycon moiety have been found to be useful in modulating a cell-mediated immune inflammatory response in mammals.

L7 ANSWER 20 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:72801 USPATFULL  
TITLE: Glycosyltransferases for biosynthesis of oligosaccharides, and genes encoding them  
INVENTOR(S): Gotschlich, Emil C., New York, NY, United States  
PATENT ASSIGNEE(S): The Rockefeller University, New York, NY, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5545553 19960813  
APPLICATION INFO.: US 1994-312387 19940926 (8)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Wax, Robert A.  
ASSISTANT EXAMINER: Hobbs, Lisa J.  
LEGAL REPRESENTATIVE: Klauber & Jackson  
NUMBER OF CLAIMS: 25  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 11 Drawing Page(s)  
LINE COUNT: 2280

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to nucleic acids encoding glycosyltransferases, the proteins encoded thereby, and to methods for synthesizing oligosaccharides using the glycosyltransferases of the invention. In particular, the present application is directed to identification a glycosyltransferase locus of *Neisseria gonorrhoeae* containing five open reading frames for five different glycosyltransferases. The functionally active glycosyltransferases of the invention are characterized by catalyzing reactions such as adding Gal .beta.1.fwdarw.4 to GlcNAc or Glc; adding GalNAc or GlcNAc .beta.1.fwdarw.3 to Gal; and adding Gal .alpha.1.fwdarw.4 to Gal. The glycosyltransferases of the invention are particularly suited to the synthesis of the oligosaccharides Gal.beta.1.fwdarw.4GlcNAc.beta.1.fwdarw.3Gal.beta.1.fwdarw.4Glc (a mimic of lacto-N-neotetraose), GalNAc.beta.1.fwdarw.3Gal.beta.1.fwdarw.4GlcNAc.beta.1.fwdarw.3Gal.beta.1.fwdarw.4Glc(beta.1.fwdarw.4 (a mimic ganglioside), and Gal.alpha.1.fwdarw.4Gal.beta.1.fwdarw.4Glc(beta.1.fwdarw.4Hep.fwdarw.R (a mimic of the saccharide portion of globo-glycolipids).

L7 ANSWER 21 OF 35 USPATFULL on STN

ACCESSION NUMBER: 96:31732 USPATFULL  
TITLE: Esterification of hydrophilic polyols by adsorption onto a solid support and employing a substrate-immiscible solvent  
INVENTOR(S): Schneider, Manfred P., Triebelsheider Weg 47, D-5600 Wuppertal 1, Germany, Federal Republic of Laumen, Kurt E., Steinackerweg 10, D-7806 March 2, Germany, Federal Republic of Berger, Matthias, Melchiorstr 24, D-5000 Koln 1, Germany, Federal Republic of

NUMBER	KIND	DATE
US 5508182		19960416
US 1994-193670		19940208 (8)

PATENT INFORMATION: US 5508182 19960416  
APPLICATION INFO.: US 1994-193670 19940208 (8)  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-834678, filed on 12 Feb 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-654979, filed on 13 Feb 1991, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Knodel, Marian C.  
ASSISTANT EXAMINER: Saucier, Sandra  
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert  
NUMBER OF CLAIMS: 7  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)  
LINE COUNT: 1493

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods for the production of amphiphilic products such as esters, sugar-esters, peptide-esters, glycolipids, glycoproteins, lipoproteins, peptides, and phosphates of alcohols, sugars, and nucleosides. The methods promote enzymatically catalyzed reactions between hydrophilic substrates such as glycerol, glucose, amino acids, and nucleosides, and second substrates such as free fatty acids, triglycerides, vinyl esters, amino acids, and phosphates. The method is also applied to enzymatic reactions with saccharides and

polyalcohols. The hydrophilic substrates are adsorbed to finely divided solid supports such as silica gel, diatomaceous earths, or activated charcoals in order to promote the dispersion of the hydrophilic substrates within hydrophobic substrates and solvents. Hydrophobic solvents such as n-hexane and t-butylmethylether may be included in the reaction mixtures.

Reactions are conducted under non-aqueous conditions in order to promote reverse hydrolysis. Methods are provided for the production of isomerically pure 1,3-diglycerides. Further methods are disclosed for the production and specific precipitation of pure 1-monoglycerides through the use of a reactor/sePARATOR system. Enzymes used in the methods include lipases from *M. mihei* and *P. fluorescens*, glycosidases such as  $\beta$ -galactosidase, proteases such as chymotrypsin, and acid or alkaline phosphatases. Compositions are provided comprising alcohols, carbohydrates, amino acids, or peptides adsorbed onto solid supports such as silica gel.

L7 ANSWER 22 OF 35 USPATFULL on STN  
ACCESSION NUMBER: 96:24844 USPATFULL  
TITLE: Method for measuring glycosyltransferase activity  
INVENTOR(S): Dennis, James W., Etobicoke, Canada  
Siminovitch, Katherine A., Toronto, Canada  
Datti, Alessandro, Terni, Italy  
PATENT ASSIGNEE(S): Mount Sinai Hospital Corporation, Toronto, Canada  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5501957	19960326	<--
APPLICATION INFO.:	US 1994-293940	19940822 (8)	
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-968865, filed on 30 Oct 1992, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Wityshyn, Michael G.		
ASSISTANT EXAMINER:	Leary, Louise N.		
LEGAL REPRESENTATIVE:	Bereskin & Parr		
NUMBER OF CLAIMS:	28		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 14 Drawing Page(s)		
LINE COUNT:	1596		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of assaying for glycosyltransferase activity in a sample. In a first step, a sample is reacted with a first sugar donor and an acceptor substrate to produce a transferase product. The first sugar donor and acceptor substrate are selected such that the sugar from the first sugar donor is capable of being transferred to the acceptor substrate in the presence of the glycosyltransferase to be assayed. In a second step, the transferase product is reacted with a second sugar donor having a sugar which is labelled with a labelling agent and an enzyme which is capable of transferring the sugar from the second sugar donor to the transferase product to produce a labelled transferase product and which has a higher affinity for the glycosyltransferase product compared to the affinity of the glycosyltransferase for the acceptor substrate. The labelling agent activity of the labelled transferase product or unreacted second sugar donor is assayed to determine transferase activity in the sample. A kit for assaying for glycosyltransferase activity in a sample is also described.

L7 ANSWER 23 OF 35 USPATFULL on STN  
ACCESSION NUMBER: 96:7785 USPATFULL  
TITLE: Construction and use of synthetic constructs encoding syndecan  
INVENTOR(S): Saunders, Scott, Boston, MA, United States  
Bernfield, Merton, Boston, MA, United States  
Kato, Masato, Boston, MA, United States  
PATENT ASSIGNEE(S): The Board of Trustees of the Leland Stanford Junior University, Palo Alto, CA, United States (U.S.)

corporation)  
Children's Medical Center Corporation, Boston, MA,  
United States (U.S. corporation)

NUMBER	KIND	DATE	
US 5486599		19960123	<--
US 1993-78683		19930617 (8)	
Continuation-in-part of Ser. No. US 1991-757654, filed on 6 Sep 1991, now abandoned And a continuation-in-part of Ser. No. US 1992-856869, filed on 24 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-746797, filed on 12 Aug 1991, now abandoned which is a continuation-in-part of Ser. No. US 1989-331585, filed on 29 Mar 1989, now abandoned			

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Wax, Robert A.  
ASSISTANT EXAMINER: Moore, William W.  
LEGAL REPRESENTATIVE: Engellenner, Thomas J., Vincent, Matthew P. Lahive & Cockfield

NUMBER OF CLAIMS: 21

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 3939

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A purified mammalian proteoglycan, and genetic information encoding such proteoglycans, having a core polypeptide molecular weight of about 30 kD to about 35 kD, and comprising a hydrophilic amino terminal extracellular region, a hydrophilic carboxy terminal cytoplasmic region, a transmembrane hydrophobic region between said cytoplasmic and extracellular regions, a protease susceptible cleavage sequence extracellularly adjacent the transmembrane region of the peptide, and at least one glycosylation site for attachment of a heparan sulfate chain to said extracellular region, said glycosylation site comprising a heparan sulfate attachment sequence represented by a formula Xac-Z-Ser-Gly-Ser-Gly, where Xac represents an amino acid residue having an acidic sidechain, and Z represents from 1 to 10 amino acid residues. Additional peptides having this glycosylation site and genetic information useful for preparing a number of variations based on this glycosylation site are also provided.

L7 ANSWER 24 OF 35 USPATFULL on STN

ACCESSION NUMBER: 95:105833 USPATFULL

TITLE: Carbohydrate-containing polymers, their preparation and use

INVENTOR(S): Stahl, Wilhelm, Frankfurt am Main, Germany, Federal Republic of

Ahlers, Michael, Mainz, Germany, Federal Republic of  
Walch, Axel, Frankfurt am Main, Germany, Federal Republic of

Bartnik, Eckhart, Wiesbaden, Germany, Federal Republic of

Kretzschmar, Gerhard, Eschborn, Germany, Federal Republic of

Grabley, Susanne, Koenigstein, Germany, Federal Republic of

Schleyerbach, Rudolf, Hofheim/Taunus, Germany, Federal Republic of

PATENT ASSIGNEE(S): Hoechst Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

NUMBER	KIND	DATE	
US 5470843		19951128	<--
US 1993-165805		19931213 (8)	

NUMBER	DATE

PRIORITY INFORMATION: DE 1992-4241829 19921211  
DE 1993-4326777 19930810  
DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Robinson, Douglas W.  
ASSISTANT EXAMINER: Fonda, Kathleen Kahler  
LEGAL REPRESENTATIVE: Foley & Lardner  
NUMBER OF CLAIMS: 14  
EXEMPLARY CLAIM: 1  
LINE COUNT: 2689

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carbohydrate-containing polymers which can have an HLB\* of from about 10 to about 20 are disclosed. The compounds comprise a hydrophilic polymer portion, a carbohydrate portion comprising from 1 to about 20 naturally occurring, identical or different, monosaccharide units, at least one bifunctional spacer coupling the carbohydrate portion to the hydrophilic polymer portion, and a potentiator moiety. The potentiator moiety can be a crosslinking moiety located within the hydrophilic polymer or a hydrophobic, hydrophilic or ionic moiety. Processes for the preparation and use of such polymers are also disclosed.

L7 ANSWER 25 OF 35 USPATFULL on STN

ACCESSION NUMBER: 95:95009 USPATFULL  
TITLE: Oligosaccharide enzyme substrates and inhibitors:  
methods and compositions  
INVENTOR(S): Wong, Chi-Huey, San Diego, CA, United States  
Ichikawa, Yoshitaka, San Diego, CA, United States  
Shen, Gwo-Jenn, Carlsbad, CA, United States  
PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

NUMBER	KIND	DATE	
US 5461143		19951024	<--
US 1994-219242		19940329 (8)	
Continuation of Ser. No. US 1992-889652, filed on 26 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-852409, filed on 16 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-738211, filed on 30 Jul 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-670701, filed on 18 Mar 1991, now patented, Pat. No. US 5278299 And a continuation-in-part of Ser. No. US 1991-707600, filed on 30 May 1991, now abandoned			

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Robinson, Douglas W.  
ASSISTANT EXAMINER: Fonda, Kathleen Kahler  
LEGAL REPRESENTATIVE: Welsh & Katz, Ltd.  
NUMBER OF CLAIMS: 11  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)  
LINE COUNT: 3735

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oligosaccharide compounds that are substrates and inhibitors of glycosyltransferase and glycosidase enzymes and compositions containing such compounds are disclosed. A method of glycosylation is also disclosed. An E. coli transformed with phagemid CMPSIL-1, which phagemid comprises a gene for a modified CMP-sialic acid synthetase enzyme, which transformed E. coli has the ATCC accession No. 68531 is also provided.

L7 ANSWER 26 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:110797 USPATFULL  
TITLE: Methods for the synthesis of monofucosylated oligosaccharides terminating in di-N-acetyllactosaminyl structures  
INVENTOR(S): Kashem, Mohammed, Edmonton, Canada  
Venot, Andre P., Edmonton, Canada  
Smith, Richard, Edmonton, Canada

PATENT ASSIGNEE(S): Alberta Research Council, Edmonton, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5374655		19941220	<--
APPLICATION INFO.:	US 1992-914172		19920714 (7)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-889017, filed on 26 May 1992 which is a continuation-in-part of Ser. No. US 1991-771259, filed on 2 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-714161, filed on 10 Jun 1991			

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1992-251	19920610
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Russel, Jeffrey E.	
ASSISTANT EXAMINER:	Leary, Louise N.	
LEGAL REPRESENTATIVE:	Burns, Doane, Swecker & Mathis	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	2027	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods for the preparation of monofucosylated and sialylated derivatives of the compound .beta.Gal(1-4).beta.GlcNAc(1-3).beta.Gal(1-4).beta.GlcNAc-OR. In particular, the methods of this invention provide for a multi-step synthesis wherein selective monofucosylation is accomplished on the 3-hydroxy group on only one of the GlcNAc units found in the .beta.Gal(1-4) .beta.GlcNAc (1-3) .beta.Gal (1-4) .beta.GlcNAc-OR compound. In this step, monofucosylation is achieved by use of the .alpha.(1-3)fucosyltransferase.

L7 ANSWER 27 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:108861 USPATFULL

TITLE: Process for producing an oligosaccharide compound by using glycosidases from a mollusc

INVENTOR(S): Nilsson, Kurt G. I., Lund, Sweden

PATENT ASSIGNEE(S): Procur Aktiebolag, Lund, Sweden (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5372937		19941213	<--
APPLICATION INFO.:	WO 9102806		19910307	<--
	US 1992-834575		19920218 (7)	
	WO 1990-SE537		19900817	
			19920218 PCT 371 date	
			19920218 PCT 102(e) date	

	NUMBER	DATE
PRIORITY INFORMATION:	SE 1989-27676	19890818
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Griffin, Ronald W.	
LEGAL REPRESENTATIVE:	Beveridge, DeGrandi, Weilacher & Young	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
LINE COUNT:	627	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of producing an oligosaccharide compound which either consists of or is a fragment or analog of the carbohydrate part in a glycoconjugate is disclosed which involves reacting

(a) at least one oligosaccharide, disaccharide, monosaccharide, or glycoside as donor substance,

(b) at least one acceptor substance containing a monosaccharide, disaccharide, oligosaccharide, glycoside, or saccharide analog, and  
(c) at least one enzyme composition produced from a mollusc and containing E.C. group 3.2 glycosidase, or the glycosidase is at least one glycosidase which has been cloned with recombinant technique and which has at least 70% homology in its amino acid sequence with the corresponding mollusc enzyme, to form the oligosaccharide compound;

wherein the oligosaccharide compound contains

(i) GlcNAc.beta.1-3Gal.beta. and the glycosidase is N-acetyl-.beta.-D-glucosaminidase,

(ii) GlcNAc.beta.1-6Man.alpha. and the glycosidase is N-acetyl-.beta.-D-glucosaminidase,

(iii) GlcNAc.beta.1-6Gal.alpha. and the glycosidase is N-acetyl-.beta.-D-glucosaminidase,

(iv) GalNAc.beta.1-3Gal.beta. and the glycosidase is N-acetyl-.beta.-D-galactosaminidase,

(v) GalNAc.alpha.1-3Gal.alpha. and the glycosidase is N-acetyl-.alpha.-D-galactosaminidase, or

(vi) Fuc.alpha.1-6Gal.beta. and the glycosidase is .alpha.-L-fucosidase.

L7 ANSWER 28 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:104487 USPATFULL

TITLE: Process for solid phase glycopeptide synthesis

INVENTOR(S): Wong, Chi-Huey, Rancho Sante Fe, CA, United States

Schuster, Matthias, San Diego, CA, United States

PATENT ASSIGNEE(S): The Scripps Research Institute, La Jolla, CA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION:	US 5369017	19941129	<--
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APPLICATION INFO.:	US 1994-191777	19940204	(8)
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DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Lilling, Herbert J.

LEGAL REPRESENTATIVE: Welsh & Katz, Ltd.

NUMBER OF CLAIMS: 13

EXEMPLARY CLAIM: 1

LINE COUNT: 1509

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the synthesis of a glycopeptide using a solid phase matrix is disclosed. The matrix is compatible with aqueous and organic solvents and is comprised of a silica-based solid support to which is linked a two-part spacer group having a chain length of about 12 to about 40 methylene groups. The first part of the spacer is covalently bonded to the silica-based support and has a length of about 3 to about 10 methylene groups. The second spacer part is covalently bonded to the first part of the spacer and comprises the distal end of the two part spacer. The second part is soluble as a free molecule in each of water, dimethylformamide and dichloromethane and has a terminal amine or hydroxyl group to which the C-terminal residue of the peptide portion of the glycopeptide chain is bonded. The chain of atoms connecting the desired glycopeptide to the solid phase matrix also includes a moiety having a selectively severable bond which on cleavage of that bond separates the matrix from whatever else is bonded to that moiety.

L7 ANSWER 29 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:86398 USPATFULL

TITLE: Methods for the enzymatic synthesis of alpha-sialylated oligosaccharide glycosides

INVENTOR(S): Venot, Andre P., Agoura Hills, CA, United States

Unger, Frank M., Vienna, Austria  
Kashem, Mohammed A., Agoura Hills, CA, United States  
Bird, Paul, Edmondton, Canada  
Mazid, M. Abdul, Novato, CA, United States  
PATENT ASSIGNEE(S): Alberta Research Council, Edmonton, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5352670	19941004	<--
APPLICATION INFO.:	US 1991-771007	19911002 (7)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-714161, filed on 10 Jun 1991		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Wityshyn, Michael G.  
ASSISTANT EXAMINER: Leary, Louise N.  
LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis  
NUMBER OF CLAIMS: 17  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 15 Drawing Figure(s); 13 Drawing Page(s)  
LINE COUNT: 3034

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods for the enzymatic synthesis of alpha-sialylated oligosaccharide glycosides. Specifically, in the disclosed methods, sialyltransferase is activated to transfer an analogue of sialic acid, employed as its CMP-nucleotide derivative, to an oligosaccharide glycoside. The analogue of sialic acid and the oligosaccharide employed in this method are selected to be compatible with the sialyltransferase employed.

L7 ANSWER 30 OF 35 USPATFULL on STN  
ACCESSION NUMBER: 94:55482 USPATFULL  
TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures  
INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States  
PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5324663	19940628	<--
APPLICATION INFO.:	US 1992-914281	19920720 (7)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned		

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Wax, Robert A.  
ASSISTANT EXAMINER: Prouty, Rebecca  
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt  
NUMBER OF CLAIMS: 11  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)  
LINE COUNT: 5605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence

of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

L7 ANSWER 31 OF 35 USPATFULL on STN

ACCESSION NUMBER: 94:15661 USPATFULL

TITLE: Apparatus for the synthesis of saccharide compositions  
INVENTOR(S): Roth, Stephen, Gladwyne, PA, United States  
PATENT ASSIGNEE(S): The Trustees of the University of Pennsylvania,  
Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5288637		19940222	<--
APPLICATION INFO.:	US 1992-955687		19921002	(7)
DISCLAIMER DATE:	20100119			
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-683810, filed on 11 Apr 1991, now patented, Pat. No. US 5180674 which is a continuation-in-part of Ser. No. US 1990-509560, filed on 16 Apr 1990, now abandoned			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Warden, Robert J.			
ASSISTANT EXAMINER:	Tran, Hien			
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier &			
NUMBER OF CLAIMS:	73			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 1 Drawing Page(s)			
LINE COUNT:	1209			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An apparatus for a glycosyltransferase-catalyzed synthesis of a tetrasaccharide composition of the formula gal-glcNAc-gal-B-1,4-glc from saccharide units and an acceptor moiety. The apparatus has a reactor, an inlet, an outlet, and contains two glycosyltransferases; an N-acetyl glucosaminyltransferase and a galactosyltransferase.

L7 ANSWER 32 OF 35 USPATFULL on STN

ACCESSION NUMBER: 93:106938 USPATFULL

TITLE: Synthetic method for enhancing glycoprotein stability  
INVENTOR(S): Bergh, Michel L. E., Somerville, MA, United States  
Hubbard, S. Catherine, Somerville, MA, United States  
Rasmussen, James R., Ithaca, NY, United States  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5272066		19931221	<--
APPLICATION INFO.:	US 1991-785913		19911104	(7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-337294, filed on 13 Mar 1989, now abandoned which is a division of Ser. No. US 1986-837604, filed on 7 Mar 1986, now patented, Pat. No. US 4925796			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Naff, David M.			
ASSISTANT EXAMINER:	Weber, Jon			
LEGAL REPRESENTATIVE:	Kilpatrick & Cody			
NUMBER OF CLAIMS:	13			
EXEMPLARY CLAIM:	1			

NUMBER OF DRAWINGS: 10 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 1361

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for modifying eukaryotic and prokaryotic proteins to extend their in vivo circulatory lifetimes. In the preferred embodiment, enzymatic and/or chemical treatments are used to produce a modified protein carrying one or more covalently attached trisaccharide, sialic acid.fwdarw.galactose.fwdarw.N-acetylglucosamine.fwdarw.(SA.fwdarw.Gal.fwdarw.GlcNAc.fwdarw.), or tetrasaccharide (SA.fwdarw.Gal.fwdarw.GlcNAc.fwdarw.GlcNAc.fwdarw.) moieties. The method can be applied to any natural or recombinant protein possessing asparagine-linked oligosaccharides or to any non-glycosylated protein that can be chemically or enzymatically derivatized with the appropriate carbohydrate units. Following injection into an animal, the modified glycoproteins are protected from premature clearance by cells of the liver and reticulo-endothelial system which recognize and rapidly internalize circulating glycoproteins with carbohydrate chains containing terminal Gal, GlcNAc, fucose or mannose residues. The method can also be used to mask antigenic determinants on foreign proteins which would otherwise pro

The United States Government has certain rights in this invention by virtue of National Institutes of Health grants No. CA26712, GN31318, and CA14051.

L7 ANSWER 33 OF 35 USPATFULL on STN

ACCESSION NUMBER: 93:5335 USPATFULL

TITLE: Saccharide compositions, methods and apparatus for their synthesis

INVENTOR(S): Roth, Stephen, Gladwyne, PA, United States

PATENT ASSIGNEE(S): The Trustees of the University of Pennsylvania, Philadelphia, PA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5180674 19930119 <--

APPLICATION INFO.: US 1991-683810 19910411 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-509560, filed on 16 Apr 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Kummert, Lynn M.

ASSISTANT EXAMINER: Tran, Hien

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt

NUMBER OF CLAIMS: 25

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1013

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and an apparatus for preparing saccharide compositions is disclosed. The m

#### GOVERNMENT SUPPORT

Portions of this invention were supported by National Science Foundation Grant DCB8817883.

L7 ANSWER 34 OF 35 USPATFULL on STN

ACCESSION NUMBER: 91:44737 USPATFULL

TITLE: Novel pyrrolizidine alkaloid

INVENTOR(S): Elbein, Alan D., San Antonio, TX, United States

Tropea, Joseph E., San Antonio, TX, United States

PATENT ASSIGNEE(S): The Board of Regents, The University of Texas System, Austin, TX, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 5021427 19910604 <--

APPLICATION INFO.: US 1988-289907 19881223 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted  
PRIMARY EXAMINER: Brown, Johnnie R.  
ASSISTANT EXAMINER: Webber, Pamela S.  
LEGAL REPRESENTATIVE: Arnold, White & Durkee  
NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 9 Drawing Page(s)  
LINE COUNT: 1240

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention involves a purified bioactive compound of the formula: ##STR1## wherein at least one of R.sub.1, R.sub.2, R.sub.3 and R.sub.4 are H or an acyl having less than about five carbon atoms. More specifically the preferred purified bioactive compound is (1R, 1R, 3R, 7S, 7aR)-3-hydroxymethyl-1,2,7-trihydroxypyrrrolizidine.

L7 ANSWER 35 OF 35 USPATFULL on STN

ACCESSION NUMBER: 90:38369 USPATFULL  
TITLE: Method for enhancing glycoprotein stability  
INVENTOR(S): Bergh, Michel L. E., Somerville, MA, United States  
Hubbard, S. Catherine, Somerville, MA, United States  
Rasmussen, James R., Ithaca, NY, United States  
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4925796		19900515	<--
APPLICATION INFO.:	US 1986-837604		19860307 (6)	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Wax, Robert			
LEGAL REPRESENTATIVE:	Kilpatrick & Cody			
NUMBER OF CLAIMS:	28			
EXEMPLARY CLAIM:	1			
NUMBER OF DRAWINGS:	10 Drawing Figure(s); 7 Drawing Page(s)			
LINE COUNT:	1445			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for modifying eukaryotic and prokaryotic proteins to extend their in vivo circulatory lifetimes. In the preferred embodiment, enzymatic and/or chemical treatments are used to produce a modified protein carrying one or more covalently attached trisaccharide, sialic acid.fwdarw.galactose.fwdarw.N-acetylglucosamine.fwdarw.(SA.fwdarw.Gal.fwdarw.GlcNac.fwdarw.), or tetrasaccharide (SA.fwdarw.Gal.fwdarw.GlcNAc.fwdarw.GlcNAc.fwdarw.) moieties. The method can be applied to any natural or recombinant protein possessing asparagine-linked oligosaccharides or to any non-glycosylated protein that can be chemically or enzymatically derivatized with the appropriate carbohydrate units. Following injection into an animal, the modified glycoproteins are protected from premature clearance by cells of the liver and reticulo-endothelial system which recognize and rapidly internalize circulating glycoproteins with carbohydrate chains containing terminal Gal, GlcNAc, fucose or mannose residues. The method can also be used to mask antigenic determinants on foreign proteins which would otherwise produce an immune response or to "target" a protein for recognition by sugar-specific cell surface receptors.